

Weatherization Assistance Program Technical Assistance Center

The Weatherization Assistance Program: An American Industry

For 40 years, the Weatherization Assistance Program has led the nation in advancing technology, research and work practices to make residential energy upgrades cost effective, safe and comprehensive.

The energy conservation resulting from the efforts of the state and local agencies that administer the WAP helps our country reduce its dependence on foreign oil, reduce carbon emissions, and decreases the cost of energy for families in need while improving the health and safety of their homes.

Two key principles guide the installation of measures: cost effectiveness measured by the savings-to-investment ratio (SIR)—the amount of energy savings versus the cost to install a measure—and the availability of health and safety funds. Through Weatherization improvements and upgrades, households save on average \$283 or more every year.

For every \$1 invested in the program, WAP returns \$2.78 in non-energy benefits.

For every \$1 invested by DOE, the Program leverages \$3.44 in other federal, state, utility, and private resources.

American Families

- Over 7 million families served.
- Low income families, on average, spend 16.3% of their total income on energy costs.

• Reducing energy costs means these families have more money to spend on food, medicine and other essentials.

American Workers

- Thousands of living-wage jobs are supported by Weatherization.
- Workers are highly trained and make up the largest energy efficiency retrofit workforce in the nation.
- These workers form a foundation of skilled individuals to support the growth of a private home energy retrofit industry.

American Businesses

- Thousands of local, American businesses are supported by the activities of the Weatherization Assistance Program.
- The WAP provides a marketplace for innovation in the energy upgrade industry and supports the growth of American businesses.

Weatherization and the Roots of the Home Performance Industry

The Weatherization Assistance Program was borne out of the oil-crisis of the 1970s. Founded with a mandate to reduce the energy burden of low-income Americans by improving the energy efficiency of their homes, the WAP has become the nation's largest whole-house home energy upgrade program. The WAP is operated in all 50 states, the District of Columbia, Native American tribes, and U.S. Territories. With a network of local agencies providing services across the country, the WAP employs more residential energy efficiency professionals than anyone in the nation.

Building Science in the Real World

The Weatherization Assistance Program takes building science from the lab to the home—over 7 million homes since its inception.

With its longevity of service, consistency of place and broad national reach, the WAP serves as a valuable proving ground and market outlet for the tools and ideas that advance the greater energy efficiency industry.

Weatherization has the ability to take the best ideas and technologies available in the industry and deploy them on a national level.

This means that advances in the energy retrofit industry can grow to market scale quickly and with the benefit of testing at the hands of experts in real-world scenarios. Thanks to Weatherization, technologies such as the blower door and infrared camera have had an opportunity to develop into essential tools. Most recently, The WAP has partnered with home energy professionals around the country to develop groundbreaking resources for work quality, training and certification.

Over the course of its 35+ year history, the WAP has become the glue that holds residential energy efficiency programs together. While many organizations that provide energy services receive more money from other sources, it is the consistency of the WAP funding and clear program guidance for cost-effective energy savings that enables them to sustain their operations year after year. The WAP funding allows organizations to leverage a modest investment with larger resources to expand their reach. In addition, the national network of Weatherization professionals allows for the development and maintenance of long term technical and policy resources, such as work quality specifications, training resources and certifications. These resources are utilized by many programs that operate beyond the WAP and into the private market. Many of the innovative manufacturers and training organizations take the work that they develop and refine within the WAP and expand them to the greater home performance market.

Training & Technical Excellence

The Weatherization Training Centers (WTCs) are specialized training organizations that teach whole-house building science to an on-the-ground workforce, which takes the training and immediately puts it into practice. WTCs receive continuous feedback from employers and from the field to improve training effectiveness. WTCs are always on the cutting edge of what works in real homes, and how to effectively communicate this to the workforce. The curriculum taught in the WTCs is rooted in the knowledge, skills and abilities outlined in the national WAP Job Task Analyses for Energy Efficiency workers. Many WTCs are now accredited by the Interstate Renewable Energy Council, the industry gold standard for energy efficiency training programs.

Weatherization: The Standard Bearer

THE GUIDELINES FOR HOME ENERGY PROFESSIONALS is a suite of resources that include work quality specifications, training program accreditation, job task analyses and certifications for workers. Developed in partnership with the home performance industry, these resources create a foundation for the entire residential energy efficiency retrofit market. Over the course of its history, the WAP has been a key player in deploying technology that has helped facilitate greater industry adoption. Through these tools, the Weatherization Assistance Program has defined residential energy upgrade work as a distinct and professional industry as well as an easy to understand product for consumers.

THE STANDARD WORK SPECIFICATIONS FOR HOME ENERGY UPGRADES (SWS) define the desired outcomes for any weatherization or home performance task to be effective, durable and safe.

THE JOB TASK ANALYSES for the four major energy upgrade job classifications define what a worker needs to know and do: Retrofit Technician/Installer, Crew Leader, Energy Auditor, and Quality Control Inspector.

THE ACCREDITATION OF ENERGY EFFICIENCY TRAINING PROGRAMS verifies that organizations training workers in the industry are qualified to teach to national standards and develop a highly skilled workforce.

THE HOME ENERGY PROFESSIONAL

CERTIFICATIONS are the only ANSI accredited certifications crafted specifically for energy upgrade professionals. Based on the Standard Work Specifications and the Job Task Analyses, these certifications provide continuity among work quality guidelines, training quality and the evaluation of the individual. ■